

REMARKS

Claims 1-24 are presented for further examination. Claims 1-5, 7-10, and 20 have been amended.

In the Office Action mailed January 16, 2004, the Examiner objected to claim 5 under 35 U.S.C. § 112, second paragraph, because “the corresponding reference” lacked antecedent basis. In addition, claims 10 and 20, line 9 each, were objected to because it was unclear if “the components” refers to “a plurality of components” in line 3. Applicants have amended claims 5, 10, and 20 to overcome the informalities. Claim 7 has been amended to correct a typographical error.

Claims 1-11, and 15-21 were rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 5,832,219 (“Pettus”). Claims 14 and 24 were rejected under 35 U.S.C. § 103(a) as unpatentable over Pettus in view of “Official Notice.” Claims 12 and 22 were rejected as obvious over Pettus in view of U.S. Patent No. 6,182,086 (“Lomet et al.”). Claims 13 and 23 were rejected as obvious over Pettus in view of U.S. Patent No. 6,223,205 (“Harchol-Balter”).

Applicants respectfully disagree with the bases for the rejections and request reconsideration and further examination of the claims.

The disclosed and claimed embodiments of the invention are directed to a system and method for managing and interfacing *network station subsystems*. Each network station is, in the preferred embodiment, a cable modem configured to be coupled to a network of cable modems that are coupled to a head end or hub. Each cable modem or network device is configured to include a plurality of application-layer components to establish and manage internet connectivity. Each of these components is designed to run as a separate task. Each component in this architecture can act as a server or a client. A management component interfaces with a client manager in the network device for providing access to the functions embodied in each of the task or “server” interfaces of each task. Thus, the “client” and “server” relationship takes place at the device level and not over the cable network communication lines.

Pettus, U.S. Patent No. 5,832,219, teaches a distributed object networking service designed to handle remote procedure calls from clients to the server over the network. Service requests from clients are accepted at the server, which calls a function stored in the server by

using a function pointer. A table of function pointers is stored in a dispatcher object (730) as shown in Figures 7 and 9 and as described in more detail at column 13, lines 26-53. A request table (908) is provided that stores a remote function pointer and an associated unique request number, as shown in Figure 9. A dictionary table (904) is also provided that associates each service program with a set of locations in the request table (908), which locations contain function pointers that can be used to access the service program methods.

Pettus specifically teaches that client requests for service are communicated over the network cable (724) to the server by using a request number. The request number is received at the server and associated via the dictionary table (904) and the request table (908) with a function pointer that is then used to call the specific function requested by the client. (See Pettus, column 13, lines 54-column 14, line 58.) Thus, Pettus specifically teaches a client requesting a service by using a request number that is transmitted over the cable network to a server that then associates the request number with a function pointer to then access the function.

In distinction, the claimed invention, as recited in method claim 1, is directed to managing client-server communications in a network device that comprises providing the network device with server components and configuring the server components to implement a functionality set; providing the server components with an interface method; providing a client component with references to the interface method; and processing client component requests by invoking the interface method on the server component via the references to the interface method. As discussed above, there is no teaching or suggestion in Pettus for storing function pointers in a client or network device, and Pettus does not teach or suggest providing server functionality in a network device that is accessed via function pointers stored in the network device. Applicants respectfully submit that claim 1 is clearly allowable over Pettus.

Dependent claims 2-4 ultimately depend from claim 1, and applicants submit that these claims are allowable for the reasons why claim 1 is allowable.

Independent claim 5 is directed to a method for network device subsystem operations. As with claim 1, this method is not directed to management of the network system as a whole but with respect to a network device such as a cable modem. Inasmuch as all of the steps are implemented within the network device, claim 5 is clearly distinguishable over the

Pettus reference. Applicants respectfully submit that claim 5 is not taught or suggested by Pettus and, along with dependent claims 6-9, is clearly allowable.

Independent claim 10 is directed to a method of interfacing communications in a network station for a data-over-cable network having a plurality of network stations. As with claim 5, the method of claim 10 is to be implemented within a device coupled to the network and not to the network itself. Applicants respectfully submit that claim 10 is not taught by Pettus and, along with dependent claims 11-14, is clearly allowable over Pettus.

Independent claim 15 is directed to a network device. Again, this claim is directed to a device and not to the network as a whole, such device including cable modems. In contrast, Pettus is directed to a network system where communication is provided between a client at one end of the system and a server at the hub end of the system. Claim 15 recites the device as comprising a server component configured with a plurality of functions and function pointers for the plurality of functions; a client component configured with references to the function pointer; and an interface manager configured to receive requests for functions from the client component and to invoke the requested functions from the server component via the function pointers. Nowhere does Pettus teach or suggest a network device, *i.e.*, a "client" as taught by Pettus that includes both server components, client components, and an interface manager for referencing server component functions at the request of client components using function pointers. Applicants submit that claim 15 is clearly allowable over Pettus, as are dependent claims 16-19.

Independent claim 20 is directed to a system for managing communications within a network station for a data-over-cable network having a plurality of network stations. Again, the system is for managing communications within a network station, and not over the entire network. Thus, the system includes a plurality of components *in the network station*, each of the components having a functionality set and a table of pointers for the functionality set; a station manager having references to the tables of pointers in the plurality of components; and an interface manager for communication with a plurality of components and a station manager, the interface manager configured to process station manager requests for functionality from the plurality of components through the interface manager via the references to the tables of

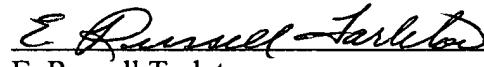
pointers. Applicants respectfully submit that Pettus does not teach or suggest such a system. Thus, claim 20, and dependent claims 21-24 are allowable.

In view of the foregoing, applicants submit that all of the claims remaining in this application are clearly in condition for allowance. In the event the Examiner disagrees, the Examiner is urged to contact applicants' undersigned representative by telephone at (206) 622-4900 in order to expeditiously resolve prosecution of this application. Consequently, early and favorable action allowing these claims and passing this case to issuance is respectfully solicited.

The Director is authorized to charge any additional fees due by way of this Amendment, or credit any overpayment, to our Deposit Account No. 19-1090.

Respectfully submitted,

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